

Specification:

Replace the third paragraph on page 2 with the following rewritten paragraph:

A tautology checking method decides whether a given Boolean function is a tautology. An equivalence checking method decides whether two given Boolean functions are equivalent. An equivalence checking method can be used as a tautology checking method if one of the two given Boolean functions is Boolean constant 1. A tautology checking method can perform equivalence checking if the given Boolean function is the exclusive nor (XNOR) of two Boolean functions. A given Boolean function is a tautology if and only if it can be simplified to Boolean constant 1. It is sometimes possible to checking tautology for a simple Boolean function with traditional Boolean simplification methods such as applying Boolean simplification theorems and using Karnaugh maps. However, these Boolean simplification methods do not work with slightly complex tautology checking methods because their failure to simplify a Boolean function to a constant does not mean all other methods must also fail.